

ATTACHMENT J.4.99

MANAGEMENT OF AT- AND BELOW-GRADE IMPACTED MATERIAL

EW-1019

MANAGEMENT OF AT- AND BELOW-GRADE IMPACTED MATERIAL

EW-1019

Effective Date: July 18, 1997

Originator (Subject Expert):	<u><i>S. Lorenz</i></u>	<u>7/17/97</u>
	S. Lorenz	Date
Checker Concurrence:	<u><i>K. Belgrave</i></u>	<u>7/17/97</u>
	K. Belgrave	Date

AUTHORIZED BY:	<u><i>T. J. Walsh</i></u>	<u>7/18/97</u>
	T. Walsh, Environmental Restoration & Waste Mgt.	Date

FERNALD ENVIRONMENTAL MANAGEMENT PROJECT

Fluor Daniel Fernald
P. O. Box 538704
Cincinnati, Ohio 45253-8704

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

*Compliance with this procedure is mandatory while
performing the activities within its scope. Only a
controlled copy may be used in the performance of work.*

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 1 of 57

TABLE OF CONTENTS

<u>SECTION</u>	<u>TITLE</u>	<u>PAGE</u>
1.0	PURPOSE	4
2.0	SCOPE	4
3.0	REFERENCES	4
4.0	RESPONSIBILITIES	5
5.0	GENERAL	8
6.0	PREREQUISITES	8
7.0	PROCEDURE	9
7.1	PLANNING WASTE DISPOSITION	9
7.2	SETTING UP THE PROJECT	12
7.3	STARTING UP THE PROJECT	13
7.4	SEGREGATING WASTE STREAMS	13
7.5	MANAGING BULK WASTE STREAMS FOR ON-SITE DISPOSITION	15
	7.5.1 Disposing of Bulk Material in RvA 17 (Sitewide) Stock Piles	15
	7.5.2 Disposing of Bulk Material in Project-Specific Stock Piles	16
	7.5.3 Managing Bulk Material in Cut-and-Fill Working Stock Piles	18
	7.5.4 Using Bulk Material as Backfill (Without Interim Stock Piling)	20
	7.5.5 Disposing of Bulk Material in the On-site Disposal Facility (OSDF) ..	21
7.6	MANAGING BULK WASTE FOR OFF-SITE DISPOSITION	26
	7.6.1 OU1 Blending Stock Pile	26
	7.6.2 OU1 Rail Transport Stock Piles (Generated Outside OU1)	28
	7.6.3 Project Stock Pile for Truck Transport	30
7.7	MANAGING CONTAINERIZED WASTE STREAMS FOR OFF-SITE DISPOSITION	32
7.8	MANAGING CONTAINERIZED WASTE STREAMS FOR ON-SITE DISPOSITION	34
8.0	RECORDS	39
9.0	DRIVERS	39
10.0	DEFINITIONS	40

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 2 of 57	

LIST OF TABLES

TABLE 1 - SPECIAL MATERIALS	41
TABLE 2 - OSDF PROHIBITED ITEMS	43
TABLE 3 - OSDF PROHIBITED CHARACTERISTICS	44
TABLE 4 - OSDF CHEMICAL AND RADIONUCLIDE CONSTITUENTS OF CONCERN	46
TABLE 5 - OSDF WASTE STREAM CATEGORIES	47

LIST OF ATTACHMENTS

ATTACHMENT A - PROJECT WASTE IDENTIFICATION AND DISPOSITION FORM (PWID)	49
ATTACHMENT B - WASTE STREAM PROFILE	51
ATTACHMENT C - MATERIAL EVALUATION FORM (MEF)	52
ATTACHMENT D - FIELD TRACKING LOG (FTL)	54
ATTACHMENT E - WASTEWATER DISCHARGE REQUEST	55
ATTACHMENT F - REQUEST FOR DISPOSAL	56
ATTACHMENT G - OSDF MANIFEST	57

<p>Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL</p> <p><i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i></p>	<p>DOCUMENT NO: EW-1019</p> <table border="1"> <tr> <td data-bbox="823 180 1226 244">Effective Date: 7/18/97</td> <td data-bbox="1226 180 1508 244">Revision No. 0</td> </tr> <tr> <td colspan="2" data-bbox="823 244 1508 300">Page 4 of 57</td> </tr> </table>	Effective Date: 7/18/97	Revision No. 0	Page 4 of 57	
Effective Date: 7/18/97	Revision No. 0				
Page 4 of 57					

1.0 **PURPOSE**

The purpose of this procedure is to manage at- and below-grade waste streams (also known as impacted or excess material) that are generated during construction projects, which includes remediation activities. This procedure provides programmatic controls for segregating waste streams in accordance with On-site Disposal Facility (OSDF) Waste Acceptance Criteria (WAC), and subsequent management of the following waste streams:

- Bulk waste streams that are dispositioned on-site
- Bulk waste streams that are dispositioned off-site
- Containerized waste streams that are dispositioned on-site
- Containerized waste streams that are dispositioned off-site

2.0 **SCOPE**

2.1 This procedure applies to all projects that generate at- and below-grade waste streams.

2.2 It applies to all waste streams that are at- and below-grade from the point of generation through final disposition, with the following limitations:

- For bulk waste streams that are dispositioned on-site, applicability ends when they are transferred to the OSDF.
- For containerized waste streams that are dispositioned off-site, applicability ends when the containers are transferred to Sampling and Characterization (S&C) in Waste Programs Management (WPM), except for inventory status reports.
- For containerized waste streams that are dispositioned on-site, applicability is limited to OSDF-related activities and inventory status reports.

Note: Waste streams that are at- and below-grade are referred to hereafter as waste streams.

3.0 **REFERENCES**

- 3.1 Sitewide Excavation Plan (SEP) - Fernald Environmental Management Project, Fernald, Ohio
- 3.2 Impacted Material Placement Plan for the On-Site Disposal Facility - Fernald Environmental Management Project, Fernald, Ohio
- 3.3 Waste Acceptance Criteria Attainment Plan for the On-Site Disposal Facility - Fernald Environmental Management Project, Fernald, Ohio
- 3.4 Site Procedure EW-0001, Initiating Waste Characterization Activities Using the Material Evaluation Form (MEF)

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 5 of 57

3.5 Site Procedure EW-0017, Management of Hazardous Waste

3.6 Site Procedure EW-0018, Management of Low-Level Waste

3.7 Division Procedure 20-C-111, Transport of Low-Level Radioactive Waste and Nuclear Material

3.8 Division Procedure 20-C-017, Transporting Hazardous/Mixed/TSCA Waste

4.0 RESPONSIBILITIES

4.1 Waste Disposition Support Services (WDSS) Department of Soil & Water Project

- Develops site drawings that identify boundaries of Waste Acceptance Criteria (WAC) attainment areas, Hazardous Waste Management Units (HWMUs), Underground Storage Tanks (USTs) and areas potentially containing Resource Conservation and Recover Act (RCRA) materials.
- Coordinates waste disposition activities among Engineering/Construction, Sampling, and Waste Programs Management (WPM).
- Provides input to the Engineering/Construction Project during the conceptual design phase for impacts of the design on waste generation and disposition requirements.
- Provides technical direction to Construction for segregating, sizing/physical processing, and disposition of waste streams.
- Provides technical direction to the Sampling and Characterization (S&C) Section of the Waste Programs Management (WPM) Department for field support of waste disposition, Field Tracking Logs (FTLs), and developing Project Waste Identification and Disposition (PWID) forms.
- Coordinates with S&C of WPM and Construction Project for field oversight and completion of FTLs during generation and disposition of waste streams.
- Provides technical direction to Soil and Water Sampling Projects for WAC-related sample plan development and implementation, including location and number of samples, analytical parameters, assignment of Data Group Identifiers (DGIs), and management of sampling-associated waste streams, such as field expendables, soil cuttings, and decontamination waters.
- Prepares Waste Stream Profiles for on-site waste streams.
- Reviews and signs On-Site Disposal Facility (OSDF) WAC sampling plans and Project Waste Identification and Disposition forms (PWIDs).
- Implements sitewide stock pile controls.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 6 of 57	

- Identifies Material Tracking Locations (MTLs) on design drawings.
- Reviews MTL data and drawings to assess OSDF WAC status for *in situ* and stock pile waste streams.
- Surveys sample locations relating to Data Group Identifiers (DGIs).
- Defines projects and associated Material Tracking Locations (MTLs) in the Integrated Information Management System (IIMS).
- Defines Data Group Identifiers (DGIs) in the IIMS, as necessary.
- Receives and enters field Tracking Logs (FTLs) into the IIMS.
- Coordinates with Waste Programs Management and Construction Project for management of containerized waste streams.
- Receives, reviews, and comments on inventory status reports for containerized waste streams from the Sitewide Waste Information Forecasting and Tracking System (SWIFTS)
- Updates and maintains the Integrated Information Management System (IIMS) database.
- Generates the IIMS documentation to demonstrate attainment of Waste Acceptance Criteria.
- Schedules shipments with OSDF.
- Generates OSDF Manifests for waste streams that will be transported to the OSDF.
- Maintains bulk waste stream files.

4.2 Engineering/Construction Project

- Assigns a representative from Waste Disposition Support Services (WDSS) to the project during the conceptual design stage.
- Identifies the Engineering/Construction point of contact for WDSS.
- Provides a copy of the design drawings to WDSS.
- Provides information to WDSS on waste streams that are anticipated, to use in completing Project Waste Identification and Disposition Form (PWID) and Material Tracking Locations (MTLs).
- Notifies WDSS of any design changes to the project.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 7 of 57

- Contacts WDSS one month prior to starting the project to review the PWID/project activity.
- Provides updated information to WDSS prior to and during project implementation.
- Provides daily information to the Waste Disposition Field Staff for completing waste stream documentation tracking logs.
- Reviews and signs PWIDs, Field Tracking Logs (FTLs), and OSDF Manifests.
- Implements controls for project-specific and working stock piles.

4.3 Sampling and Characterization Section of Waste Programs Management (WPM)

- Provides input on managing waste streams while planning and executing the project.
- Prepares and updates PWIDs.
- Provides field support during excavation activities, including technical direction for segregating waste streams, completing Field Tracking Logs, and coordinating with Transportation and Storage of the WPM Department.
- Maintains project files, including PWIDs, copies of Field Tracking Logs, and other relevant information.
- Prepares Material Evaluation Forms (MEFs) for containerized waste streams that are dispositioned off-site and Waste Stream Profiles for containerized waste streams that are being dispositioned on-site.
- Receives, manages and dispositions containerized waste streams that are designated by WDSS for potential off-site disposition.
- Receives, manages, and dispositions containerized waste streams that are designated by WDSS for potential on-site disposition.
- Provides WDSS with status reports on containerized waste inventory.

4.4 Storage of WPM - Provides interim storage for containerized material, pending on- or off-site disposal.

4.5 Transportation of WPM

- Transports containers to and from project drop off points (DOPs)
- Signs the manifest upon receipt of the load.
- Transports material from the project area to the OSDF.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 8 of 57

4.6 Characterization Section of the Soil Characterization and Excavation Project (SCEP) - Provides WDSS with lists of Area-Specific Constituents of Concern (ASCOCs) for project areas.

4.7 Sampling Project of the Soil and Water Project Division

- Assigns a WDSS representative to the sampling project while developing the sampling plan.
- Includes waste disposition protocols in the sampling plan for WDSS review and approval.
- Records Data Group Identifiers (DGIs), as directed by WDSS, to sample populations that may be used to demonstrate attainment of Waste Acceptance Criteria (WAC) for the OSDF.

4.8 Data Management Section of the Soil and Water Project Division - Updates the Sitewide Environmental Database (SED) with new data by using DGIs.

4.9 Operable Unit 1 (OU1) Construction

- Reviews and approves candidate inventory for the OU1 blending pile.
- Implements controls for stock piles within OU1 boundaries.
- Dispositions designated materials at an approved off-site facility.

4.10 Environmental Programs (EP)

- Coordinates requests for new stock piles with regulatory agencies.
- Reviews and signs PWIDs that include off-site disposition at solid waste landfills.

4.11 On-Site Disposal Facility (OSDF) - Reviews and signs manifests.

5.0 GENERAL

- 5.1** Field activities associated with management of waste streams shall comply with the project health and safety plan.
- 5.2** Spills of hazardous waste, hazardous substances, mixed waste, and Low-Level Radioactive Waste (LLRW) shall be reported in accordance with DOE Order 5000.3B.

6.0 PREREQUISITES

- 6.1** Project work plans must be approved by appropriate parties prior to initiating excavation or sampling activities.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 9 of 57	

7.0 PROCEDURE

7.1 PLANNING WASTE DISPOSITION

Note: If projects are to disposition their wastes in an efficient manner, it is imperative that waste disposition be addressed during project design at the conceptual stage.

Engineering/Construction Project

1. Contact Waste Disposition Support Service (WDSS) upon initiation of the conceptual design stage.
2. Provide WDSS with the engineering drawing(s) of the project area(s).
3. Identify areas on the engineering drawing(s) where excess material will be excavated, stock-piled, or used as backfill.

Waste Disposition Support Service (WDSS) of the Soil and Water Project

4. Define boundaries of Waste Acceptance Criteria (WAC) attainment areas, Hazardous Waste Management Units (HWMUs), Underground Storage Tanks (USTs), and areas potentially containing Resource Conservation and Recover Act (RCRA) materials.

Note: Areas potentially containing RCRA materials are defined in the OU2 and OU5 Records of Decision (RODs).

5. Develop drawing(s) that identify boundaries of Waste Acceptance Criteria (WAC) attainment areas, HWMUs, USTs, and areas potentially containing RCRA materials.
6. Update drawings upon receipt of additional data.

Characterization Section of the Soil Characteristic and Excavation Project

7. Provide WDSS with list(s) of Area-Specific Constituents of Concern (ASCOCs) for project area(s).

Waste Disposition Support Services (WDSS) Section of the Soil and Water Project

8. Designate WDSS and S&C of WPM staff for assignment to the Engineering/Construction Project.
9. Participate in the Engineering/Construction Project planning sessions to provide input on impacts of the design on waste generation and disposition requirements.
10. Contact the Sampling Project to identify any sampling events for the project areas.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 10 of 57	

Sampling Project of the Soil and Water Project

11. Identify to WDSS any planned sampling events for the project area.
12. Coordinate with WDSS to develop any additionally required sampling programs.
13. Coordinate with the WDSS representative while developing sampling plans.
14. Address waste disposition protocols in the sample plan(s).

WDSS Section of the Soil and Water Project

15. Assign Data Group Identifiers (DGIs) for sample populations that may be used to demonstrate attainment of OSDF Waste Acceptance Criteria.
16. Review and approve sample plan(s).

Sampling Project of the Soil and Water Project

17. Provide WDSS with a copy of the final sampling plan(s), revisions, and variances.
18. Assign DGIs to sample populations during field implementation as directed by WDSS.

Data Management Section of the Soil and Water Project

19. Update the Sitewide Environmental Database (SED) with new data by using DGIs.

WDSS of the Soil and Water Project

20. Review drawings of WAC attainment areas, areas potentially containing RCRA materials, HWMUs, and USTs for applicability to the project area.
21. Review Sitewide Environmental Database (SED) data for the project area.
22. Identify project areas that potentially exceed the OSDF Waste Acceptance Criteria (WAC).
23. Identify Material Tracking Locations (MTLs) on the project drawing, based on OSDF WAC status and intended disposition of each waste stream.

Note: Each source MTL is a waste stream. Types of MTLs include the following: WAC attainment areas, stock piles, containers, containment areas, interim areas, grids, and drop-off points.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 11 of 57

24. Identify the following for each waste stream:

- Matrix
- Characterization method
- Estimated volume
- Interim storage location
- Anticipated final disposition

25. Update the MTL drawing to include any stock-pile needs identified above.

26. Provide copies of the MTL drawing and waste stream estimates to the Sampling and Characterization (S&C) Section of the Waste Programs Management (WPM) Department.

S&C Section of the WPM Department

27. Review the MTL drawing and waste stream estimates with Waste Disposition Support Services (WDSS).

28. Develop FS-F-4920, Project Waste Identification Disposition (PWID) Form, shown in Attachment A.

29. Initiate the PWID review and signature cycle.

30. Distribute the signed copy of FS-F-4920, PWID, to WDSS, the Engineering/Construction Project, and the Sampling Project.

31. Place a copy of the PWID in the project file.

Waste Disposition Support Services (WDSS) Section of the Soil and Water Project

32. Revise the MTL drawing, if necessary, to conform with the final PWID.

33. Provide a copy of the final MTL drawing to Sampling and Characterization (S&C) Section of the Waste Programs Management (WPM) Department, the Engineering/Construction Project, and the Sampling Project.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL	DOCUMENT NO: EW-1019	
<i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	Effective Date: 7/18/97	Revision No. 0
	Page 12 of 57	

7.2 SETTING UP THE PROJECT

Waste Disposition Support Services (WDSS) of the Soil and Water Project

1. Define the project in the Integrated Information Management System (IIMS) by entering the following information:
 - Project (FS-F-4920, Project Waste Identification and Disposition) number
 - Project name
 - Grids associated with each Material Tracking Location (MTL)
 - Area-Specific Constituents of Concern (ASCOCs)
 - FS-F-4921, Waste Stream Profile numbers
 - FS-F-4927, Material Evaluation Form (MEF) numbers
2. Update the IIMS with new data from the Site-wide Environmental Database (SED) by using DGIs, when (any) sampling programs are completed.
3. Update MTL drawings if they are affected by the above new data, and distribute to S&C of the WPM and the Engineering/Construction Project.
4. For on-site, bulk, waste streams, prepare draft FS-F-4921, Waste Stream Profiles, shown in Attachment B.
5. Contact Environmental Programs (EP) regarding any need for regulatory agency approval of new stock piles.

Environmental Programs

6. Contact regulatory agencies, and request approval for any new stock piles.
7. Provide WDSS with documentation of approval or denial of each new stock pile.

Sampling and Characterization (S&C) of WPM

8. For off-site waste streams, prepare draft FS-F-4927, Material Evaluation Forms (MEFs), shown in Attachment C.
9. For each anticipated bulk and containerized waste stream, enter the project (PWID) number and project name on an FS-F-4922, Field Tracking Log (FTL), shown in Attachment D.
10. Prepare an FS-F-4045, Wastewater Discharge Request Form, in Attachment E, for anticipated liquids that will be discharged to the AWWT by way of the storm water collection system .
11. Place the three forms in the project file.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 13 of 57

Construction Project

12. Notify Waste Disposition Support Services (WDSS) one month prior to starting the project.

7.3 STARTING UP THE PROJECT

Waste Disposition Support Services (WDSS) of the Soil and Water Project

1. Notify the Construction Project of the Waste Disposition Field Staff assigned to the project.
2. Assign WDSS office staff to the project.
3. Determine the schedule for submittal of FS-F-4922, Field Tracking Logs (FTLs), shown in Attachment D.

Note: FTLs should be submitted daily for generation rates of ≥ 50 cy/day, and weekly for slower rates.

Construction Project

4. Coordinate with WDSS to segregate and disposition waste at the point of generation, in accordance with the requirements outlined in the following sections of this procedure:
 - a. Segregating Waste Streams in Section 7.4
 - b. Managing Bulk Waste Streams for On-Site Disposition in Section 7.5.
 - c. Managing Bulk Waste Streams for Off-Site Disposition in Section 7.6.
 - d. Managing Containerized Waste Streams for Off-Site Disposition in Section 7.7.
 - e. Managing Containerized Waste Streams for On-Site Disposition in Section 7.8.

7.4 SEGREGATING WASTE STREAMS

Construction Project

1. Segregate Special Materials, and manage them in accordance with Table 1.

Waste Disposition Field Staff of WDSS

2. Provide technical direction for identifying, segregating, and managing Special Materials.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 14 of 57	

Construction Project

3. Segregate OSDF Prohibited Items identified in Table 2, and manage them in accordance with Section 7.6 or 7.7.

Waste Disposition Field Staff of WDSS

4. Provide technical direction for identifying, segregating, and managing Prohibited Items.

Note: The Resource Conservation and Recovery Act (RCRA) characteristic prohibition applies only to areas that are identified in the OU5 and OU2 RODs. The OSDF Prohibited Characteristics are in Table 3.

Construction Project

5. Segregate waste streams that meet the OSDF chemical, radiological, and physical Waste Acceptance Criteria, in accordance with Impacted Material Categories.
 - a. For the OSDF Chemical and Radionuclide Constituents of Concern, refer to Table 4.
 - b. For the Impacted Material Categories, refer to Table 5, OSDF Waste Stream Categories - Physical Waste Acceptance Criteria.
 - c. Manage waste streams in accordance with Sections 7.5 and 7.8.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

6. Provide technical direction for identifying, segregating, and managing waste streams that meet the OSDF chemical, radiological, and physical Waste Acceptance Criteria.

Note: WAC status is based on MTL data, which is the best available information, or in the case of disposition to OSDF, data that complies with the OSDF WAC Attainment Plan.

7. Determine OSDF WAC compliance for at- and below-grade debris in one of these ways:
 - a. Visually inspect the debris for hold-up material.
 - b. In the case of commingled soil and debris that consists primarily of soil, apply analytical data for the surrounding soils to the debris.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 15 of 57

Construction Project

8. Segregate waste streams that exceed the OSDF chemical, radiological, or physical WAC.
9. Manage the waste streams in accordance with Section 7.6 or 7.7.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

10. Provide technical direction for identifying, segregating, and managing waste streams that exceed the OSDF chemical, radiological, and physical WACs.

Note: WAC status is based on MTL data, which is the best available information, or in the case of disposition to OSDF, data that complies with the OSDF WAC Attainment Plan.

11. Determine OSDF WAC compliance the same way as in Step 7 above.

7.5 MANAGING BULK WASTE STREAMS FOR ON-SITE DISPOSITION

Note: Material in this category meets the OSDF chemical, radiological, and physical Waste Acceptance Criteria.

7.5.1 Disposing of Bulk Material in RvA 17 (Sitewide) Stock Piles

Waste Disposition Support Services (WDSS) of the Soil and Water Project

1. Maintain the following physical fixtures for each stock pile:
 - Security (cyclone) fencing
 - Gate with lock
 - Silt fencing
 - Covering, when not in use

Note: The preferred cover is a crusting agent.

2. When any existing tarps deteriorate, replace them with a crusting agent.

Construction Project

3. Contact WDSS with source Material Tracking Location (MTL), stock-pile number, and the date that you need access to the Removal Action (RvA) 17 stock pile.

WDSS of the Soil and Water Project

4. Review FS-F-4920, Project Waste Identification and Disposition (PWID), to verify that the source MTL is approved for the designated RvA 17 stock pile.
5. Unlock the gate at the start of business on the requested date.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 16 of 57

6. Lock the gate at the close of business each day that a stock pile is in use.

Construction Project

7. Provide MTL-specific information for the FS-F-4922, Field Tracking Log (FTL), to Waste Disposition Field Staff.
8. Transport approved material to the designated RvA 17 stock pile.
9. For visible dust while the stock pile is used, implement controls such as a water mist.
10. Compact dispositioned soils at the close of each business day.
11. Review and sign FS-F-4922, Field Tracking Log (FTL), and return to Waste Disposition Field Staff.

WDSS of the Soil and Water Project

12. Enter FTL information into the IIMS.
13. Place Copy 1 of the Field Tracking Log (FTL) in the tracking log.
14. Place Copy 2 of the FTL in the stock pile Material Evaluation Form (MEF) file.
15. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of the WPM Department.

S&C of WPM

16. Place Copy 3 of the FTL in the project file.

7.5.2 Disposing of Bulk Material in Project-Specific Stock Piles

Construction Project

1. Maintain the following physical fixtures for each stock pile:
 - Silt fencing
 - Covering, when not in use

Note: The preferred cover is a crusting agent.

<p>Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL</p> <p><i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i></p>	<p>DOCUMENT NO: EW-1019</p>	
	<p>Effective Date: 7/18/97</p>	<p>Revision No. 0</p>
	<p>Page 17 of 57</p>	

2. Implement controls to ensure that only PWID-designated inventory is placed in the stock pile.
 - a. For stock piles in easily accessible areas, use security fencing and a locked gate.
 - b. In other cases, use temporary perimeter fencing and posting.
3. Contact WDSS with source Material Tracking Locations (MTLs), stock pile identifier, and dates of anticipated use.

WDSS of the Soil and Water Project

4. Review FS-F-4920, Project Waste Identification and Disposition (PWID), to verify that the source MTL is approved for the designated stock pile.
5. Complete FS-F-4921, Waste Stream Profile(s), and place in the waste stream file.

Construction Project

6. Provide MTL-specific information for FS-F-4922, Field Tracking Logs (FTL), to the Waste Disposition Field Staff.
7. Transport approved material to the designated project-specific stock pile.
8. When dust is visible during stock pile use, implement controls such as water mist.
9. Compact dispositioned soils at the close of each business day.
10. Review and sign Field Tracking Logs (FTL), and return to Waste Disposition Field Staff.

WDSS of the Soil and Water Project

11. Enter FTL information into the IIMS.
12. Place Copy 1 of the Field Tracking Logs (FTL) in the tracking log.
13. File Copy 2 of the FTL with FS-F-4921, Waste Stream Profile.
14. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of Waste Programs Management (WPM).

S&C of WPM

15. Place Copy 3 of the FTL in the project file.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 18 of 57	

7.5.3 Managing Bulk Material in Cut-and-Fill Working Stock Piles

Note: The Construction Project will reuse material within the same Material Tracking Location (MTL) or in an MTL with similar chemical and/or radiological contaminants. However, use of a cut-and-fill stock pile is limited to 30 days. If any material remains after 30 days, WDSS will disposition it to an approved project-specific or RvA 17 sitewide stock pile.

Construction Project

1. Maintain the following physical fixtures for each cut-and-fill stock pile:

- Silt fencing
- Covering, when not in use

Note: The preferred cover is a crusting agent.

2. Implement controls to ensure that only PWID-designated inventory is placed in the stock pile.
 - a. For stock piles in easily accessible areas, use security fencing and a locked gate.
 - b. In other cases, use temporary perimeter fencing and posting.
3. Contact Waste Disposition Support Services (WDSS) with the following:
 - Source Material Tracking Locations (MTLs)
 - MTLs in which the material will be used for cut and fill
 - Estimated maximum volume
 - Dates of anticipated use

WDSS of the Soil and Water Project

4. Review the MTL drawing and associated data to determine if MTLs are appropriate for cross-contamination.
5. Identify the disposition location that will be used for any soils that remain in the stock pile at 30 days.
6. Approve or deny, and give a disposition location for any 30 day material to the Construction Project.
7. Notify Sampling and Characterization (S&C) in WPM of the cut-and-fill stock pile location, anticipated volume, affected MTLs, and disposition location for any 30 day material.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 19 of 57

Sampling and Characterization (S&C) in WPM

8. Update FS-F-4920, PWID, to reflect cut-and-fill working stock pile, and disposition location for any 30 day material.

Construction Project

9. Provide MTL-specific information for the FS-F-4922, Field Tracking Log (FTL) to the Waste Disposition Field Staff.
10. Transport approved material to and from the designated cut-and-fill stock pile.
11. When dust is visible during stock pile use, implement controls such as a water mist.
12. Compact dispositioned soils at the close of each business day.
13. Review and sign FS-F-4922, FTL, and return to the Waste Disposition Field Staff.

WDSS of the Soil and Water Project

14. Maintain the paper file of FTLs.
15. Notify the Construction Project and Waste Disposition Field Staff when the cut-and-fill stock pile has been in use for 30 days.

Construction Project

16. Provide the final volume of the cut-and-fill stock pile (less than or equal to 30 days) to WDSS.
17. Transport any remaining material to the location designated in the PWID.

WDSS of the Soil and Water Project

18. Enter the final Field Tracking Log (FTL) into the IIMS to reflect the final volume in cut-and-fill stock pile.
19. For material transported to a project-specific stock pile, complete FS-F-4921, Waste Stream Profile(s), and place in the waste stream file.
20. Place Copy 1 of the Field Tracking Log (FTL) in the tracking log.

<p>Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL</p> <p><i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i></p>	<p>DOCUMENT NO: EW-1019</p>	
	<p>Effective Date: 7/18/97</p>	<p>Revision No. 0</p>
	<p>Page 20 of 57</p>	

21. File Copy 2 of the FTL with one of the following forms depending on the type of stock pile:

- a. For a project-specific stock pile, file Copy 2 with the Waste Stream Profile.
- b. For a RvA 17 stock pile, file Copy 2 with the FS-F-4927, Material Evaluation Form (MEF).

22. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of the WPM Department.

S&C of WPM

23. Place Copy 3 of the FTL in the project file.

7.5.4 Using Bulk Material as Backfill (Without Interim Stock Piling)

Note: Material will be reused within the same Material Tracking Location (MTL), or in an MTL with similar chemical and/or radiological contaminants.

Construction Project

1. Contact WDSS with source MTL(s), MTLs in which the material will be backfilled, estimated volume, and dates of anticipated activity.

WDSS of the Soil and Water Project

2. Review MTL drawing(s) and associated data to determine if MTLs are appropriate for cross-contamination.
3. Approve or deny.
4. Notify Sampling and Characterization (S&C) of WPM of the affected MTLs and anticipated volume.

S&C of WPM

5. Update the FS-F-4920, Project Waste Identification and Disposition (PWID), to reflect backfill operations.

Construction Project

6. Provide MTL-specific information for the FS-F-4922, Field Tracking Log (FTL), to the Waste Disposition Field Staff.
7. Transport approved material to the backfill location.
8. Review and sign the FTL, and return to Waste Disposition Field Staff.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 21 of 57	

Waste Disposition Support Services (WDSS) of the Soil and Water Project

9. Enter the FTL information into the IIMS.
10. Place copies 1 and 2 of the FTL in the tracking log.
11. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of WPM.

S&C of WPM

12. Place Copy 3 of the FTL in the project file.

7.5.5 Disposing of Bulk Material in the On-site Disposal Facility (OSDF)

Note: Bulk material dispositioned to the OSDF may originate from the following:

- RvA 17 (site-wide) stock pile
- Project-specific stock pile
- Project excavation

Note: OSDF WAC sampling programs and data management for all bulk materials other than RvA 17 stock piles are addressed during Planning Waste Disposition (Section 7.1) and Setting Up the Project (Section 7.2). Only waste streams flagged as "meets WAC" in the IIMS may be dispositioned to the OSDF.

7.5.5.1 Disposing of Bulk Material from RvA 17 Stock Piles in the OSDF

Construction Project

1. Contact WDSS with the anticipated date(s) of excavation.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

2. Prepare a Sampling and Analysis Plan for OSDF waste streams.

Sampling Project of the Soil and Water Project

3. Implement the sampling program.

WDSS of the Soil and Water Project

4. Review the analytical results against OSDF Waste Acceptance Criteria (WAC).

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 22 of 57	

5. Take one of the following steps depending on whether the stock pile meets OSDF WAC:
 - a. If the stock pile fails OSDF WAC, manage the stock pile for off-site disposition according to Section 7.6.
 - b. If the stock pile meets OSDF WAC, prepare FS-F-4921, Waste Stream Profile, in Attachment B and FS-F-4928, Request for Disposal (RFD), in Attachment F, and go on with the rest of these steps.
6. Attach the Waste Stream Profile to the RFD, place a copy of the RFD in the waste stream file, and submit the original to the OSDF.

OSDF in the Soil and Water Project

7. Review and approve or deny the RFD, and return to WDSS.

WDSS of the Soil and Water Project

8. Take one of the following steps depending on whether the RFD is denied:
 - a. If the RFD is denied, manage the stock pile for off-site disposition according to Section 7.6.
 - b. If the RFD is approved, flag the Profile in the IIMS as "meets WAC," and go on with the rest of these steps.
9. Schedule shipment(s) with the OSDF.
10. For each truckload, prepare one FS-F-4919, OSDF Manifest, in Attachment G.
11. Send the manifest(s) to the Waste Disposition Field Staff.

Construction Project

12. Review the manifest(s), sign, and give to the transporter.

Transportation

13. Review and sign the manifest(s).
14. Transport material to the OSDF with one manifest accompanying each truckload.

OSDF in the Soil and Water Project

15. Review and sign the manifest to accept the material into the OSDF.
16. Provide Copies 1, 2, and 3 of the signed manifest to Waste Disposition Support Services (WDSS) .

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 23 of 57	

17. Retain Copy 4.

WDSS of the Soil and Water Project

18. Enter the manifest receipt into the IIMS.

19. File Copy 1 of the manifest in the tracking log.

20. File Copy 2 of the manifest in the waste stream file.

21. Forward Copy 3 of the manifest to Sampling and Characterization (S&C) of WPM.

S&C of WPM

22. File Copy 3 of the manifest in the project file.

7.5.5.2 Disposing of Bulk Material from Project-Specific Stock Piles in the OSDF

Construction Project

1. Contact Waste Disposition Support Services (WDSS) with source MTL (stock pile number) and anticipated dates of excavation.

WDSS of the Soil and Water Project

2. Review the IIMS to verify that data has been entered that supports a "meets WAC" classification.

3. Flag Waste Stream Profiles in the IIMS as "meets WAC".

4. Schedule shipment(s) with the OSDF.

5. Prepare one OSDF Manifest per truckload, and give to the Waste Disposition Field Staff.

Construction Project

6. Review the manifest, sign, and give to the transporter.

Transportation

7. Review and sign the manifest.

8. Transport the material to the OSDF with one manifest accompanying each truckload.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 24 of 57	

OSDF of the Soil and Water Project

9. Review and sign the manifest to accept the material into OSDF.
10. Give Copies 1, 2, and 3 of the signed manifests to Waste Disposition Support Services (WDSS).
11. Retain Copy 4.

WDSS of the Soil and Water Project

12. Enter the manifest receipt into the IIMS.
13. File Copy 1 of the manifest in the tracking log.
14. File Copy 2 of the manifest in the waste stream file.
15. Forward Copy 3 of the manifest to Sampling and Characterization (S&C) of WPM.

S&C of WFM

16. File Copy 3 of the manifest in the project file.

7.5.5.3 Disposing of Bulk Material From Excavations

Construction Project

1. Contact Waste Disposition Support Services (WDSS) with the source Material Tracking Locations (MTLs), estimated volume per MTL, and anticipated date(s) of transport.

WDSS of the Soil and Water Project

2. Review the IIMS to verify that data has been entered that supports a "meets WAC" classification.
3. If sampling is conducted during excavation, complete the following activities:
 - a. Survey potential "meets WAC" populations, and assign Data Group Identifiers (DGIs).
 - b. Prepare Waste Stream Profile(s), and attach DGI(s).
 - c. Place the Profiles in the waste stream file.
 - d. Review the IIMS to verify that data has been entered that supports a "meets WAC" classification.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 25 of 57	

4. Flag the Waste Stream Profile(s) in the IIMS as "meets WAC".
5. Schedule shipment(s) with the OSDF.
6. Prepare one type of manifest per Waste Stream Profile and one OSDF Manifest per truckload.
7. Give the manifests to the Waste Disposition Field Staff.

Construction Project

8. Review the manifest, sign it, and give it to the Transporter.

Transportation

9. Review and sign the manifest.
10. Transport material to the OSDF with one manifest accompanying each truckload.

OSDF in the Soil and Water Project

11. Review and sign the manifest to accept material to the OSDF.
12. Give Copies 1, 2, and 3 of the signed manifest to WDSS.
13. Retain Copy 4.

WDSS of the Soil and Water Project

14. Enter the manifest receipt into the IIMS.
15. File Copy 1 of the manifest in the tracking log.
16. File Copy 2 of the manifest in the waste stream file.
17. Forward Copy 3 of the manifest to Sampling and Characterization (S&C) of WPM.

S&C of WPM

18. File Copy 3 of the manifest in the project file.

<p>Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL</p> <p><i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i></p>	<p>DOCUMENT NO: EW-1019</p>	
	<p>Effective Date: 7/18/97</p>	<p>Revision No. 0</p>
	<p>Page 26 of 57</p>	

7.6 MANAGING BULK WASTE FOR OFF-SITE DISPOSITION

7.6.1 OU1 Blending Stock Pile

Note: Material dispositioned to the OU1 blending pile exceeds the OSDF radionuclide Waste Acceptance Criteria (WAC).

Operable Unit 1 Construction

1. Maintain the following physical fixtures for the blending stock pile:

- Silt fencing
- Covering, when not in use

Note: The preferred cover is a crusting agent.

2. Implement controls to ensure that only PWID-designated inventory is placed in the stock pile.
 - a. For stock piles in easily accessible areas, use security fencing and a locked gate.
 - b. In other cases, use temporary perimeter fencing and posting.

Construction Project

3. Contact WDSS with source Material Tracking Locations (MTLs) and dates of anticipated transport to the OU1 blending stock pile.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

4. Review FS-F-4920, Project Waste Identification and Disposition Form (PWID), to verify that the source MTL is approved for the designated OU1 blending stock pile.
5. Give MTL data to Operable Unit 1 Construction.
6. Complete FS-F-4921, Waste Stream Profile, and place in the waste stream file.
7. Give Operable Unit 1 Construction the status of the Constituents of Concern (COC) in the material.

Operable Unit 1 Construction

8. Review and approve requests for disposition to the blending stock pile.

Construction Project

9. Coordinate with Operable Unit 1 Construction for inventory disposition.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 27 of 57	

10. Give MTL-specific information for the FS-F-4922, Field Tracking Log (FTL), to the Waste Disposition Field Staff.

11. Transport the approved material to the blending stock pile.

12. When dust is visible during stock pile use, implement controls such as a water mist.

13. Compact dispositioned soils at the close of each business day.

14. Review and sign the FTL, and return to the Waste Disposition Field Staff.

WDSS of the Soil and Water Project

15. Enter FTL information into the IIMS.

16. Place Copy 1 of the FTL in the tracking log.

17. Place Copy 2 of the FTL in the waste stream file.

18. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of WPM.

S&C of WPM

19. Place Copy 3 of the FTL in the project file.

Operable Unit 1 Construction

20. Conduct blending operations.

21. Conduct sampling in conformance with the off-site facility requirements.

22. Prepare the off-site facility waste profile.

23. Coordinate waste stream acceptance with the off-site facility.

24. Prepare a manifest from the Department of Transportation (DOT) for rail shipment to an approved off-site facility.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 28 of 57	

7.6.2 OU1 Rail Transport Stock Piles (Generated Outside OU1)

Note: Material dispositioned to OU1 from other projects exceeds the OSDF radionuclide Waste Acceptance Criteria (WAC).

Construction Project

1. Maintain the following physical fixtures for each stock pile:

- Security fencing
- Gate and lock
- Silt fencing
- Covering, when not in use

Note: The preferred cover is a crusting agent.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

2. Review Material Tracking Locations (MTL) data for candidate stock pile materials against the off-site facility Waste Acceptance Criteria (WAC).

Sampling and Characterization (S&C) in WPM

3. Prepare the off-site facility waste profile.

Construction Project

4. Unlock the gate at the start of business each day on the requested dates.
5. Give MTL-specific information for the Field Tracking Log (FTL) to the Waste Disposition Field Staff.
6. Transport the approved material to the designated stock pile.
7. When dust is visible during stock pile use, implement controls such as a water mist.
8. Compact dispositioned soils at close of each business day.
9. Lock the gate at the close of business each day that the stock pile is in use.
10. Review and sign the FTL, and return to the Waste Disposition Field Staff.

WDSS of the Soil and Water Project

11. Enter the FTL data into the IIMS.
12. Place Copy 1 of the FTL in the tracking log.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 29 of 57	

13. Place Copy 2 in the waste stream file.

14. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of WPM.

S&C of WPM

15. Place Copy 3 of the FTL in the project file.

Sampling Project of the Soil and Water Project

16. Prepare a sampling plan in conformance with the off-site facility requirements.

17. Conduct a confirmatory sampling program in accordance with the sampling plan.

18. Upon receipt of analytical results, submit to Waste Disposition Support Services (WDSS).

WDSS of the Soil and Water Project

19. Document the receipt of the data, and forward to Sampling and Characterization (S&C) of WPM.

S&C of WPM

20. Incorporate the data package into the off-site waste profile, and submit to WDSS.

WDSS in the Soil and Water Project

21. Coordinate waste stream acceptance with the off-site facility.

Operable Unit 1 Construction

22. Notify WDSS when ready to ship the material.

Construction Project

23. Transfer "ownership" of the material to OU1.

Operable Unit 1 Construction

24. Prepare a manifest from DOT for rail shipment to an approved off-site facility.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 30 of 57	

7.6.3 Project Stock Pile for Truck Transport

Note: Material in the project stock pile is managed in bulk. This material exceeds the OSDF radionuclide and/or chemical WAC.

Construction Project

1. Maintain the following physical fixtures for each stock pile:

- Silt fencing
- Covering, when not in use

Note: The preferred cover is a crusting agent.

2. Implement controls to ensure that only PWID-designated inventory is placed in the stock pile.
 - a. For stock piles in easily accessible areas, use security fencing and a locked gate.
 - b. In other cases, use temporary perimeter fencing and posting.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

3. Review MTL data for candidate stock pile materials against the off-site facility Waste Acceptance Criteria (WAC).

Sampling and Characterization (S&C) of WPM

4. Prepare an off-site facility waste profile, and submit to WDSS.

Construction Project

5. Give MTL-specific information for FS-F-4922, Field Tracking Log (FTL), to the Waste Disposition Field Staff.
6. Transport approved material to the designated stock pile.
7. When dust is visible during stock pile use, implement controls such as a water mist.
8. Compact dispositioned soils at close of each business day.

9. Review and sign the FTL, and return to the Waste Disposition Field Staff.

WDSS of the Soil and Water Project

10. Enter FTL data into the IIMS.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 31 of 57	

11. Place Copy 1 of the Field Tracking Log (FTL) in the tracking log.
12. Place Copy 2 in the waste stream file.
13. Forward Copy 3 of the FTL to Sampling and Characterization (S&C) of WPM.

S&C of WPM

14. Place Copy 3 of the FTL in the project file.

Sampling Project of the Soil and Water Project

15. Prepare a sampling plan to satisfy the off-site facility requirements.
16. Conduct the confirmatory sampling program in accordance with the off-site facility requirements.
17. Upon receipt of the analytical results, submit to Waste Disposition Support Services (WDSS).

WDSS of the Soil and Water Project

18. Document receipt of the data, and forward to Sampling and Characterization (S&C) of WPM.

S&C of WPM

19. Incorporate data package into the off-site facility waste profile, and submit to WDSS.

WDSS in the Soil and Water Project

20. Review the off-site facility waste profile.
21. Coordinate waste stream acceptance with the off-site facility.
22. Prepare the off-site manifest.

Construction Project

23. Review the manifest, sign, and give to the off-site transporter.
24. Forward the generator copy of the manifest to WDSS.

WDSS of the Soil and Water Project

25. Enter the manifest information into the IIMS.
26. Place a copy of the manifest in the waste stream file.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 32 of 57	

7.7 MANAGING CONTAINERIZED WASTE STREAMS FOR OFF-SITE DISPOSITION

Note: Material in this category cannot be managed in bulk. It exceeds the OSDF chemical, radiological, or physical Waste Acceptance Criteria, and it cannot be processed to meet the OSDF WAC.

Waste Disposition Support Services (WDSS) of the Soil and Water Project

1. Contact Sampling and Characterization (S&C) of WPM for delivery of the container to the project area.

S&C of WPM

2. Deliver the containers to the project area Drop-Off Point (DOP).

Construction Project

3. Transfer potential above-WAC-material to containers.
4. Give the information to the Waste Disposition Field Staff for FS-F-4922, Field Tracking Log (FTL).

WDSS of the Soil and Water Project

5. Prepare the Field Tracking Log (FTL).
6. Give Copy 1 of the FTL to Transportation of WPM when the filled containers are picked up from the DOP.
7. Place Copy 2 in the tracking log.
8. Forward Copies 3 and 4 of the FTL to Sampling and Characterization (S&C) of WPM.
9. Enter the FTL into the IIMS.

S&C of WPM

10. Place Copy 3 of the FTL in the Material Evaluation Form (MEF) file.
11. Place Copy 4 in the project file.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 33 of 57	

Transportation of WPM

12. Follow one of these division procedures to transport containers to interim storage:
 - a. For low-level radioactive waste, follow 20-C-111.
 - b. For hazardous waste, follow 20-C-017.

Storage of WPM

13. Receive the containerized material for interim storage, and manage in accordance with WPM procedures, EW-0017 and EW-0018.

Sampling and Characterization (S&C) in WPM

14. Characterize material for off-site disposition in accordance with EW-0001, including sampling and analysis.
15. If the material has not been previously analyzed according to Step 16 in Section 7.8, include OSDF WAC COCs in addition to those required by the off-site facility.
16. Take one of the following steps depending on whether the material fails the OSDF WAC:
 - a. If it fails, continue with Step 17.
 - b. If not, go to Step 16 of Section 7.8.
17. Manage containers, and coordinate off-site disposition in accordance with WPM procedures, EW-0017 and EW-0018.
18. Submit monthly inventory status reports to Waste Disposition Support Services (WDSS).

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 34 of 57	

7.8 MANAGING CONTAINERIZED WASTE STREAMS FOR ON-SITE DISPOSITION

Note: Material that falls into one of the following categories cannot be managed in bulk:

- Material that requires physical or chemical processing to meet OSDF WAC.
- Material that requires confirmatory sampling.
- Material that meets the OSDF WAC, but requires special handling for health and safety concerns (a.k.a. Special Material).

Waste Disposition Support Services (WDSS) of the Soil and Water Project

1. Contact Sampling and Characterization (S&C) of WPM to deliver containers to the project area.

S&C of WPM

2. Deliver containers to the project area drop-off point (DOP).

Construction Project

3. Transfer the material to containers.
4. Give information to the Waste Disposition Field Staff for the FS-F-4922, Field Tracking Log (FTL).

WDSS of the Soil and Water Project

5. Prepare the FTL.
6. Give Copy 1 of the FTL to Transportation of WPM when the filled containers are picked up from the DOP.
7. Place Copy 2 of the FTL in the Field Tracking Log.
8. Forward Copies 3 and 4 of the FTL to Sampling and Characterization (S&C) of WPM.
9. Enter the FTL into the IIMS.

Sampling and Characterization (S&C) of WPM

10. Place Copy 3 in the waste stream file.
11. Place Copy 4 in the project file.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 35 of 57	

Transportation of WPM

12. Transport containers to interim storage in accordance with one of the following procedures:

- 20-C-111 for low-level radioactive waste
- 20-C-017 for hazardous waste

Storage of WPM

13. Receive the containerized material for interim storage.

Sampling and Characterization (S&C) of WPM

14. Review the Field Tracking Log (FTL) to determine if sampling and analysis or processing is required.

15. Take one of the following steps depending on whether sampling is required:

- a. If sampling is required, continue with Step 16.
- b. If not, go to Step 46 of this section.

16. Initiate a sampling program in accordance with the Sampling and Analysis Plan for OSDF waste streams.

17. Review analytical results to determine if the waste meets the OSDF chemical and radiological Waste Acceptance Criteria.

18. Take one of the following steps depending on whether the material meets the OSDF WAC:

- a. If the material meets the OSDF WAC, continue with Step 19.
- b. If not, go back to Step 14 of Section 7.7.

19. Prepare FS-F-4921, Waste Stream Profile and FS-F-4928, Request for Disposal (RFD).

20. Attach the Profile to the RFD, place a copy of the RFD in the waste stream file, and submit the original to the OSDF.

OSDF of the Soil and Water Project

21. Review and approve or deny the RFD.

22. Forward Copies 1, 2, and 3 to Sampling and Characterization (S&C) of WPM.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 36 of 57	

23. Retain Copy 4.

Sampling and Characterization (S&C) of WPM

24. File Copy 1 in the waste stream file.

25. File Copy 2 in the project file.

26. Forward Copy 3 to Waste Disposition Support Services (WDSS).

WDSS of the Soil and Water Project

27. File Copy 3 of the RFD in the tracking log.

28. Take one of the following steps:

- a. If the RFD is approved, continue with Step 29.
- b. If not, go to Step 14 in Section 7.7.

29. Flag the Profile in the IIMS as "meets WAC".

30. Schedule the shipment with the OSDF.

31. For each truckload, prepare one FS-F-4919, OSDF Manifest, and forward to Sampling and Characterization (S&C) of WPM.

S&C of WPM

32. Review and sign the manifest.

33. Contact Transportation of WPM to have container(s) moved to the OSDF.

34. Give the Transporter of WPM the manifest when the material is picked up.

Transportation of WPM

35. Review and sign the manifest.

36. Transport the material to the OSDF with one manifest accompanying each truckload.

OSDF of the Soil and Water Project

37. Review and sign the manifest to accept material into the OSDF.

38. Provide Copies 1, 2, and 3 of the signed manifest to Sampling and Characterization (S&C) of WPM.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 37 of 57	

39. Retain Copy 4.

Sampling and Characterization (S&C) of WPM

40. File Copy 1 of the manifest in the waste stream file.

41. File Copy 2 of the manifest in the project file.

42. Forward Copy 3 of the manifest to Waste Disposition Support Services (WDSS) .

WDSS of the Soil and Water Project

43. Enter the manifest into the IIMS.

44. File Copy 3 of the manifest in the tracking log.

45. Take one of the following steps:

- a. If the waste streams require physical or chemical processing, continue to Step 46.
- b. If not, go to Step 72.

Sampling and Characterization (S&C) of WPM

46. Arrange for any required physical or chemical processing.

47. Prepare FS-F-4921, Waste Stream Profile, and FS-F-4928, Request for Disposal (RFD).

48. Attach the Profile to the RFD, place a copy of the RFD in the waste stream file, and submit the original to the On-Site Disposal Facility (OSDF).

OSDF of the Soil and Water Project

49. Review and approve or deny the RFD.

50. Forward Copies 1, 2, and 3 to Sampling and Characterization of WPM.

51. Retain copy 4.

Sampling and Characterization of WPM

52. File Copy 1 of the RFD in the waste stream file.

53. File Copy 2 in the project file.

54. Forward Copy 3 to Waste Disposition Support Services (WDSS).

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 38 of 57	

WDSS of the Soil and Water Project

55. File Copy 3 of the RFD in the tracking log.

56. Take one of the following steps:

- a. If the OSDF approved the RFD, continue with the next step.
- b. If not, go to Step 14 of Section 7.7.

57. Flag the Profile in the IIMS as "meets WAC".

58. Schedule the shipment with the OSDF.

59. Prepare one OSDF Manifest per truckload, and forward to Sampling and Characterization of WPM.

Sampling and Characterization of WPM

60. Review and sign the OSDF Manifest.

61. Contact Transportation of WPM to have the container(s) moved to the OSDF.

62. Provide the Transporter of WPM with the OSDF Manifest when the material is picked up.

Transportation of WPM

63. Review and sign the manifest.

64. Transport the material to OSDF with one manifest accompanying each truckload.

OSDF in the Soil and Water Project

65. Review and sign the OSDF Manifest to accept material into the OSDF.

66. Give Copies 1, 2, and 3 of the signed manifest to Sampling and Characterization of WPM.

Sampling and Characterization of WPM

67. File Copy 1 of the manifest in the waste stream file.

68. File Copy 2 of the manifest in the project file.

69. Forward Copy 3 of the manifest to Waste Disposition Support Services (WDSS).

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 39 of 57	

WDSS of the Soil and Water Project

70. Enter the manifest receipt into the IIMS.

71. File Copy 3 of the manifest in the tracking log.

Sampling and Characterization of WPM

72. Submit monthly inventory reports to WDSS.

8.0 RECORDS

The following documents will be generated as records as a result of this procedure and will be managed according to RM-0032, FEMP Records Management Program Administrative Procedures:

- FS-F-4922, Field Tracking Log (FTL)
- Tracking log
- FS-F-4921, Waste Stream Profile
- FS-F-4927, Material Evaluation Form (MEF)
- FS-F-4920, Project Waste Identification and Disposition Form (PWID)
- FS-F-4928, Request for Disposal (RFD)
- FS-F-4919, OSDF Manifest
- FS-F-4045, Wastewater Discharge Request

9.0 DRIVERS

- 9.1 U.S. DOE, FMPC, and U.S. EPA 1991 Consent Agreement as Amended Under CERCLA Section 120 and 106(a)
- 9.2 Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)
- 9.3 Resource Conservation and Recovery Act (RCRA)
- 9.4 DOE Order 5000.3B, Occurrence Reporting and Processing of Operations Information

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 40 of 57	

10.0 DEFINITIONS

- 10.1 At- and below-grade material - Soil, debris, and ancillary waste (also known as impacted or excess material) that is generated during construction projects.
- 10.2 Data group identifiers (DGI) - Unique numbers that are assigned to sample populations at the time of sampling to facilitate retrieval of data for OSDF WAC demonstration.
- 10.3 Impacted material - Soil, debris, and ancillary waste that has been impacted by site activities. This term is used interchangeably in this procedure with "excavated material", "material", "waste" and "waste stream." Note that radiological classifications are based on other criteria, and do not necessarily parallel waste stream management protocols.
- 10.4 OSDF Waste Acceptance Criteria (WAC) - Chemical, radiological, and physical criteria that waste streams must meet if they are to be disposed of in the OSDF.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 41 of 57

TABLE 1 - SPECIAL MATERIALS

PROTOCOLS FOR SPECIAL MATERIAL

SPECIAL MATERIAL	EXAMPLES	PROTOCOLS
Asbestos	Transite panels, floor tile, feeder cable, piping insulation	<p>General: Unprotected ACM may not be staged in the excavation area. If delays are expected prior to OSDF disposition, containerize and transport to interim storage.</p> <p>Wrapped pipe: Size reduce, double bag or equivalent for OSDF Category 3 or 5. Pipe may be split axially or radially.</p> <p>Transite sheets: Band and manage as OSDF Category 5.</p> <p>Other ACM that meets OSDF Category 5: Double bag</p> <p>ACM that does not meet OSDF WAC: Containerize and transport to interim storage for off-site evaluation.</p> <p>Note: OSDF Category 5 is evaluated on a case-by-case basis. A Request For Disposal (RFD) is required.</p>
Non-pressurized Containers	Intact drums, metal and wood boxes, cans	<p>Intact containers: Visually inspect for leaks and indication of contents. Overpack or repack leaking containers prior to movement from area of discovery. If safety considerations allow, open container and record description of contents on Visual Inspection Form. Transport to interim storage for further evaluation.</p> <p>Empty containers: Crush or size reduce and manage as OSDF Category 2.</p>
Pressurized Containers	Aerosol cans, freon containers, gas cylinders, propane tanks, fire extinguishers	<p>General: Handle intact containers as though they contain material. Evaluate container integrity. Intact containers: Overpack and move to FEMP interim storage area for evaluation. If container is to be dispositioned in OSDF, it must be punctured, crushed or cut so that the interior is open to the atmosphere.</p> <p>Breached containers: Evaluate for OSDF Categories 2, 3 and 5. Category 5 is evaluated on a case-by-case basis and requires a RFD.</p>
Piping and sumps	Drain lines, sewer lines, process piping, floor sumps	<p>General: Elevate one end of exposed pipe, cut, and empty flowable material into a container. Transport containers to interim storage for evaluation.</p> <p>Process piping: Cap and remove pipe after emptying. Evaluate piping for OSDF Category 2. Containerize any piping that requires off-site disposition.</p> <p>General piping: Cap and remove pipe after emptying. Manage as OSDF Category 2.</p> <p>Sumps: Remove after emptying. Manage as OSDF Category 2.</p> <p>Note: MEF/SWIFTS research is required prior to trenching activities.</p>
Non-soil Residues	Green salt, black oxide, sump cake, fly ash	<p>Field screen to determine radionuclide content. Segregate uranium-bearing residues, containerize, and transport to interim storage for evaluation. Stockpile non-uranium residues and evaluate for OSDF Category 1 or 5. Category 5 requires a RFD.</p>

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 42 of 57

TABLE 1 - SPECIAL MATERIALS (Cont'd)

Transformers	Electrical equipment	General: Segregate and evaluate to determine if contains fluids. Empty transformers: Manage as OSDF Category 2, 3, or 5. Fill void spaces greater than 1 cf. with flowable, cohesionless material or a quick set grout. Category 5 requires an RFD. Transformers containing fluids: Drain fluids into a container and transport to interim storage. Evaluate fluids for off-site disposition. Manage emptied transformer as described above.
Lead Acid Batteries		Segregate, containerize and transport to interim storage for evaluation.
Uranium Metal	Derbies, ingots, billets, irregularly shaped scrap	Segregate, containerize, and transport to interim storage area for off-site evaluation. Will either be classified as nuclear material and sold, or classified as a waste and disposed off site.
Medical/Infectious Waste	Syringes, vials	Evaluate on case-by-case basis for OSDF Category 5 (requires a RFD). Containerize and move to interim storage if field operations do not allow timely completion of this evaluation. Medical/infectious waste not meeting OSDF requirements will be containerized and transported to interim storage for off-site evaluation.
Miscellaneous Debris	Oil/air filters, radiators, cable/wire, tools, heavy equipment, office materials, documents	Evaluate on case-by-case basis for OSDF Category 5 (requires a RFD). Containerize and move to interim storage if field operations do not allow timely completion of this evaluation. Miscellaneous debris not meeting OSDF requirements will be containerized and transported to interim storage for off-site evaluation.
Tires	Tires from miscellaneous equipment	Containerize and transport to interim storage for off-site evaluation.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 43 of 57	

TABLE 2 - OSDF PROHIBITED ITEMS

OSDF PROHIBITED ITEMS⁽¹⁾

PROHIBITED ITEM	EXAMPLES / COMMENTS
Materials not accompanied by the required manifest	IIMS system provides either electronic or paper manifest.
Material received from off site	OSDF is designated for Fernald material only.
RCRA characteristic waste ⁽²⁾	Treat to below characteristic level
Equipment > 4' height	Cut equipment to meet Category 3, or request approval for disposition as Category 5.
Pressurizable gas cylinders	Cylinders must be emptied and sized/filled to meet Category 2 or 3.
Process related metals	Examples include derbies, ingots, billets, and uranium scrap.
Product, residues, other special material	Examples include green salt, black oxide, and sump sludges from process facilities.
Materials containing free liquids	Liquid limit defines free liquids.
Intact drums	Drums must be empty and crushed.
Acid brick	
Transformers	Transformers must be crushed or filled with grout.
Tires	
Used oils	

(1) This table is based on information contained in the OSDF Impacted Material Placement (IMP) Plan.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

*Compliance with this procedure is mandatory while
performing the activities within its scope. Only a
controlled copy may be used in the performance of work.*

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 44 of 57

TABLE 3 - OSDF PROHIBITED CHARACTERISTICS

OSDF PROHIBITED CHARACTERISTICS ^{(1), (2)}

RCRA CHARACTERISTIC WASTE CODE	CONSTITUENT OF CONCERN	CONCENTRATION
D004	Arsenic	5.0 mg/L
D005	Barium	100 mg/L
D018	Benzene	0.5 mg/L
D006	Cadmium	1.0 mg/L
D019	Carbon tetrachloride	0.5 mg/L
D020	Chlordane	0.03 mg/L
D021	Chlorobenzene	100 mg/L
D022	Chloroform	6.0 mg/L
D007	Chromium	5.0 mg/L
D023	o-Cresol	200 mg/L
D024	m-Cresol	200 mg/L
D025	p-Cresol	200 mg/L
D026	Cresol	200 mg/L
D016	2,4-D	10.0 mg/L
D027	1,4-Dichlorobenzene	7.5 mg/L
D028	1,2-Dichloroethane	0.5 mg/L
D029	1,1-Dichloroethylene	0.7 mg/L
D030	2,4-Dinitrotoluene	0.13 mg/L
D012	Endrin	0.02 mg/L
D031	Heptachlor (and its epoxide)	0.008 mg/L
D032	Hexachlorobenzene	0.13 mg/L
D033	Hexachlorobutadiene	0.5 mg/L
D034	Hexachloroethane	3.0 mg/L
D008	Lead	5.0 mg/L
D013	Lindane	0.4 mg/L
D009	Mercury	0.2 mg/L
D014	Methoxychlor	10.0 mg/L
D035	Methyl ethyl ketone	200.0 mg/L
D036	Nitrobenzene	2.0 mg/L
D037	Pentachlorophenol	100.0 mg/L

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 45 of 57

TABLE 3 - OSDF PROHIBITED CHARACTERISTICS (Cont'd)

RCRA CHARACTERISTIC WASTE CODE	CONSTITUENT OF CONCERN	CONCENTRATION
D038	Pyridine	5.0 mg/L
D010	Selenium	1.0 mg/L
D011	Silver	5.0 mg/L
D039	Tetrachloroethylene (PCE)	0.7 mg/L
D015	Toxaphene	0.5 mg/L
D040	Trichloroethylene (TCE)	0.5 mg/L
D041	2,4,5-Trichlorophenol	400.0 mg/L
D042	2,4,6-Trichlorophenol	2.0 mg/L
D017	2,4,5-TP (Silvex)	1.0 mg/L
D043	Vinyl chloride (Chloroethylene)	0.2 mg/L

- (1) This table is based on 40 CFR 261.24, Table 1 - Maximum Concentration of Contaminants for the Toxicity Characteristic.
- (2) The RCRA Characteristic Prohibition applies only to areas that are identified in the OU5 and OU2 RODs.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

*Compliance with this procedure is mandatory while
performing the activities within its scope. Only a
controlled copy may be used in the performance of work.*

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 46 of 57

TABLE 4 - OSDF CHEMICAL AND RADIONUCLIDE CONSTITUENTS OF CONCERN

OSDF CHEMICAL AND RADIONUCLIDE CONSTITUENTS OF CONCERN ⁽¹⁾

CONSTITUENTS OF CONCERN	CONCENTRATION (TOTALS)
Neptunium-237	3.12×10^6 pCi/g
Strontium-90	56.7×10^6 pCi/g
Technetium-99	29.1 pCi/g
Uranium-238	346 pCi/g
Total Uranium	1030 mg/kg
Carbazole	72.7×10^3 mg/kg
Bis(2-chloroisopropyl)ether	2.44×10^2 mg/kg
Alpha-chlordane	2.89×10^0 mg/kg
Bromodichloromethane	9.03×10^{-1} mg/kg
4-Nitroaniline	4.42×10^{-2} mg/kg
Chloroethane	3.92×10^{-2} mg/kg
Vinyl chloride	1.51×10^0 mg/kg
Tetrachloroethene	128 mg/kg
Trichloroethene	128 mg/kg
1,1-Dichloroethene	11.4 mg/kg
1,2-Dichloroethene	11.4 mg/kg
Toxaphene	106×10^3 mg/kg
Boron	1.04×10^3 mg/kg
Mercury	56.6×10^3 mg/kg

(1) This table is based on information contained in the OSDF Impacted Material Placement (IMP) Plan.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 47 of 57

TABLE 5 - OSDF WASTE STREAM CATEGORIES

OSDF WASTE STREAM CATEGORIES - PHYSICAL WASTE ACCEPTANCE CRITERIA ⁽¹⁾				
IMPACTED MATERIAL CATEGORY No. ⁽²⁾	CATEGORY DESCRIPTION	PHYSICAL REQUIREMENTS	EXAMPLES	DECISION PROCESS ⁽³⁾
Category 1	Soil and soil-like	<ul style="list-style-type: none"> o Compactible using standard construction equipment o Any hard agglomerations < 12" o Other than till or ash, < 1" particle size o Able to be compacted using standard soil compaction equipment/procedures o Moisture content: Liquid limit defines excessive liquids (P) ⁽⁴⁾ 	<ul style="list-style-type: none"> o Fly ash o Majority of OU2 and OU5 soils 	[1] Evaluate impacted soil and soil-like material for Category 1. If it fails, proceed to Category 2.
Category 2	Materials that can be transported, placed, spread and compacted <i>en masse</i>	<ul style="list-style-type: none"> o Moderately compactible using Caterpillar D-8 dozer or 815C compactor type equipment o Irregularly shaped metals & finish/superstructure components < 10' long and 18" thick o Concrete reinforcement bars cut within a nominal 12 inches of the mass o General building rubble (concrete, masonry, similar materials) - < 10' long and 18" thick o Equipment - drained of all oils and liquids o Piping > 12" diameter - split in half o Moisture content: Liquid limit defines excessive liquids (P) o Intact drums must be empty and crushed (P) o Debris may not include acid brick (P) o Transformers must be crushed or filled with grout (P) 	<ul style="list-style-type: none"> o Broken-up concrete foundations o Soil mixed with broken-up concrete o Other debris not requiring individual placement (see Category 3) o General building rubble, e.g., wood, drywall, HVAC systems, electrical systems, plumbing systems, minor equipment 	<p>[2.a] Evaluate impacted soil and soil-like materials for Category 2. If it fails, proceed to Category 5.</p> <p>[2.b] Evaluate impacted debris for Category 2. If it fails, proceed to Category 3.</p>

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL

Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 48 of 57

TABLE 5 - OSDF WASTE STREAM CATEGORIES (Cont'd)

Category 3	Materials that require individual handling and placement	o Suitable for having soil/soil-like material placed around/against them o Height < 4' o Rectangular shaped o Concrete protrusions < 18" o Void spaces > 1 ft ³ filled with cohesionless material or a quick set grout o Not compatible with standard compaction equipment o Concrete reinforcement bars cut within a nominal 12 inches of the mass o Equipment - drained of all oils and liquids o Transformers must be crushed or filled with grout (P)	o Equipment	[3] Evaluate impacted debris for Category 3. If it fails, proceed to Category 5.
IMPACTED MATERIAL CATEGORY No. (1)	CATEGORY DESCRIPTION	PHYSICAL REQUIREMENTS	EXAMPLES	DECISION PROCESS (2)
Category 4	Materials with high organic content (e.g., humus or vegetation)	o Highly compressible o Moisture content: Liquid limit defines excessive liquids (P)	o Vegetation, i.e., trees, limbs, underbrush o Materials from the solid waste landfill	[4] Evaluate organic materials for Category 5. Note: Soils which contain organic materials should not be classified as Category 4. See Category 1.
Category 5	Materials that require special handling due to their special nature	o Regulated ACM - Double-bagged (or equivalent) and delivered unmixed with other material o ACM brick and commingled debris - double-contained and segregated from other materials o ACM insulated piping - delivered unmixed with other material o Equipment - drained of all oils and liquids o Transformers must be crushed or filled with grout (P)	o Double bagged asbestos o ACM insulated pipe o Sludges	[5] Submit a request for disposal (RFD) to OSDF. Note: At this time, the OSDF does not anticipate accepting oversized debris under Category 5.

(1) This table is based on information in the OSDF Impacted Material Placement (IMP) Plan.

(2) The selection of the appropriate category is a process of elimination beginning with Category 1. The majority of impacted material will be Category 1, second largest volume being Category 2, with the majority of the remainder being Category 3. Category 4 has limited applicability. Category 5 is for material that requires a Request for OSDF Disposal (RFD).

(3) Items marked with "(P)" reflect specific OSDF IMP Plan prohibitions. (P) indicates a high probability of applicability to the identified category. A complete list of prohibitions is provided in the Prohibited Items table.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 49 of 57	

ATTACHMENT A - PROJECT WASTE IDENTIFICATION AND DISPOSITION FORM (PWID)

PROJECT WASTE IDENTIFICATION AND DISPOSITION (PWID) FORM

Project Name:		Project #:		Date of Original PWID:	Current Revision:
Project Location:		Operating Unit #:		Project Lead: Phone #:	Prepared By:
Project Area (1-7):				Project Type: <input type="checkbox"/> Remediation <input type="checkbox"/> Maintenance <input type="checkbox"/> Construction	
Project Description: Additional detail provided in: <input type="checkbox"/> Work Plan <input type="checkbox"/> Work Order <input type="checkbox"/> Other, Specify: _____					
Start Date:				Estimated Completion Date:	

PROJECT WASTE IDENTIFICATION AND DISPOSITION (PWID) FORM

A. Soil					
SDF Category or Soil Type	Source MTL #	Bulk Volume (cy)	Profile Number	OSDF WAC (Y/N/T/U)	Disposition
1.					
2.					
3.					
4.					
B. At- and Below-Grade Debris					
OSDF Category or Debris Type	Source MTL #	Bulk Volume (cy)	Profile	OSDF WAC (Y/N/T/U)	Disposition
1.					
2.					
4.					
5.					

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 50 of 57	

ATTACHMENT A - PROJECT WASTE IDENTIFICATION AND DISPOSITION FORM (Cont'd)

C. Water and Miscellaneous Waste					
Waste Type	Source MTL #	Bulk Volume (cy)	Profile Number	OSDF WAC (Y/N/T/U)	Disposition
1.					
3.					
4.					
5.					
PROJECT WASTE IDENTIFICATION AND DISPOSITION (PWID) FORM					
D. Approvals					
1. Environmental Programs:	Date:	Comments: <i>(Signature required only if waste is designated for off-site shipment to a solid waste disposal facility.)</i>			
2. Waste Disposition Support Services:	Date:	Comments:			
3. WPM Sampling and Characterization:	Date:	Comments:			
4. Project Lead:	Date:	Comments:			

Distribution:

Environmental Programs
WDSS
WPM S&C
Project Lead

FS-F-4920 (07/08/97)

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 51 of 57	

ATTACHMENT B - WASTE STREAM PROFILE

WASTE STREAM PROFILE

PROFILE #: S **Date:** _____

☐ **Project Name:** _____ **Project #:** _____
or
☐ **Sitewide** A

Source MTL(s): _____
Interim MTL To: _____

Source/Material Description: M
P
L
E

Data Group Identifier (DGI) #: _____

OSDF WAC EVALUATION:
☐ Meets WAC
☐ Does Not Meet WAC
☐ Tentative Meets WAC
☐ Requires Additional Evaluation for WAC Compliance

Signature: _____ **Date:** _____

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 52 of 57	

ATTACHMENT C - MATERIAL EVALUATION FORM (MEF)

Fernald Environmental Management Project MATERIAL EVALUATION FORM (MEF)

Requestor Section

page 1 of 2

A. REQUESTOR/WASTE STREAM IDENTIFICATION			
1. MEF#: Original: _____ Revision: _____	2. Date Submitted:	3. Material Type and Source Code:	
4. Requestor Name:	5. Phone No.:	6. Badge No./Co. Name:	

B. GENERATION INFORMATION			
1. Provide best descriptive name for material:	2. Does this material originate in a HWMU or SWMU? Unit Name/No.	3. Project, Activity, or Work Area generating waste (include CRU # if applicable).	
4. Date of first or expected generation: <input type="checkbox"/> estimate; <input type="checkbox"/> actual _____	5. Generation Quantity:	6. Generation frequency:	7. Similar waste stream MEF# (or MTC/SRC):
8. Provide a detailed description of what the material is:			
9. Provide a detailed description of how and where (specific origin) the waste stream is/will be generated, including any units which manage the material:			
<p>[Note: Generator must attach all supporting documentation concerning items 8 and 9.]</p> <p> <input type="radio"/> additional narrative; <input type="radio"/> SOP; <input type="radio"/> MSDS; <input type="radio"/> AEDO Log excerpt; <input type="radio"/> release report; <input type="radio"/> manufacturing specs; <input type="radio"/> Other: _____ </p>			

C. PHYSICAL CHARACTERISTICS		
1. Describe Color/Appearance:	2. Phase: <input type="checkbox"/> Liquid <input type="checkbox"/> Solid debris/rubble <input type="checkbox"/> Semi-solid/sludge <input type="checkbox"/> Dry solid residue <input type="checkbox"/> dry powder/dusty residue <input type="checkbox"/> Other, specify: _____	3. Contains Free Liquids: <input type="checkbox"/> yes <input type="checkbox"/> no <input type="checkbox"/> unknown based on: <input type="radio"/> PFLT (results attached) <input type="radio"/> Visuals (results attached) <input type="checkbox"/> Knowledge of waste
<p>[NOTE: DO NOT SMELL THE MATERIAL]</p> 4. Note Any Incidental Odor:	5. Layers: <input type="checkbox"/> single layer <input type="checkbox"/> bi-layered <input type="checkbox"/> multi-layered	6. pH: specify range or "unknown" <input type="checkbox"/> estimate; <input type="checkbox"/> documentation attached
		7. Flash Point: Specify range or "unknown" <input type="checkbox"/> estimate; <input type="checkbox"/> documentation attached

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

*Compliance with this procedure is mandatory while
performing the activities within its scope. Only a
controlled copy may be used in the performance of work.*

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 54 of 57

ATTACHMENT D - FIELD TRACKING LOG (FTL)

**Attachment 4
Field Tracking
Soil and Debris Routing Sheet**

1. Project		2. Project Name		3. Date		Form #					
4. From:		5. To:		6. Material		7. Volume		8. Subcontractor Initials		9. Container Storage	
Source MTL		Type	Destination MTL		Type	Profile/MEP # or Description				Loc / Area	Staging Name
1.								YF			
2.								YF			
3.								YF			
4.								YF			
5.								YF			
6.								YF			

9. Construction Project Signature: _____ Date: _____

Note: This Field Log is to be completed and signed on a daily basis and a copy provided to SCD Waste Disposition Support Services (WDSS). Contact 648-1864

Entry Sheet Notes:

1. Enter the RMS Project Number
2. Enter the RMS Project Name
3. Enter today's date in MM/DD/YY format.
4. Enter the RMS Designation for the source MTL and MTL Type.
MTL Types: A = WAC Attachment Area C = Container D = Material Drop-off
G = Grid I = Interim Protect Area S = Stockpile
5. Enter the RMS Designation for the destination MTL and MTL Type. Note: Use SCEP OSDF Manifest for shipments of impacted material to the OSDF.
MTL Type codes are the same as in block 4.
6. Enter either the Profile/MEP Number or the Material Description Code of the material being moved. Numbers to be used for above-grade debris are listed on the reverse of this form. Material Description Codes for Interim movements are:
A = Asphalt/Concrete O = Other Manufactured Debris R = Rock/Gravel
S = Soil V = Vegetation/Organic Debris
7. Volume to the nearest cubic yard.
8. Subcontractor initials.
9. Container staging information; for MCSA use only.

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

*Compliance with this procedure is mandatory while
performing the activities within its scope. Only a
controlled copy may be used in the performance of work.*

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 55 of 57

ATTACHMENT E - WASTEWATER DISCHARGE REQUEST

WASTEWATER DISCHARGE REQUEST FORM

SECTION I: WASTEWATER INFORMATION

Wastewater Source Description: _____

Wastestream Identification (MEF #, Lot #, Well #, etc.): _____

Most Recent Analytical Data Attached: ☐ YES ☐ NO

Total volume and/or flow rate of proposed discharge: _____

Requested Discharge Date: _____

Requestor: _____

Telephone Number: _____

Date: _____

SECTION II: ACCEPTABILITY EVALUATION

Discharge Allowed? ☐ YES ☐ NO

If yes, describe basis of decision and required point of entry into WWTS: _____

If no, describe basis for denial: _____

Evaluated By: _____

Date: _____

SECTION III: DISCHARGE VERIFICATION

In order for any wastewater to be discharged, Section II must be checked "Y" and the point of entry into the WWTS must be defined. If there are any questions or concerns about the proposed discharge, contact RP at 738-8644 or 738-9046.

Date of Discharge: _____

Volume of Discharge: _____

Facility Owner: _____

The above signature of the facility owner certifies the discharge was accomplished as directed by RP in Section II.

Title: MANAGING AT- AND BELOW-GRADE IMPACTED MATERIAL <i>Compliance with this procedure is mandatory while performing the activities within its scope. Only a controlled copy may be used in the performance of work.</i>	DOCUMENT NO: EW-1019	
	Effective Date: 7/18/97	Revision No. 0
	Page 56 of 57	

ATTACHMENT F - REQUEST FOR DISPOSAL

REQUEST FOR DISPOSAL FORM

OSDF CATEGORY # (CIRCLE ONE): 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input checked="" type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>		FORM #: _____
PROFILE #: _____ [ATTACH PROFILE.]		
DATA PACKAGE #: _____ [ATTACH DATA PACKAGE.]		
VOLUME OF WASTE STREAM (CY): _____		
NUMBER AND SIZE OF CONTAINERS: [ATTACH INVENTORY REPORT.]		
REQUESTOR NAME: _____	REQUESTOR SIGNATURE: _____	
MATERIAL APPROVED FOR OSDF DISPOSAL: YES <input checked="" type="checkbox"/> NO <input type="checkbox"/>		
REFUSAL BASIS: _____		
OSDF NAME: _____	OSDF SIGNATURE: _____	

P
L
E

**Title: MANAGING AT- AND BELOW-GRADE
IMPACTED MATERIAL**

*Compliance with this procedure is mandatory while
performing the activities within its scope. Only a
controlled copy may be used in the performance of work.*

DOCUMENT NO: EW-1019

Effective Date: 7/18/97

Revision No. 0

Page 57 of 57

ATTACHMENT G - OSDF MANIFEST

On-Site Manifest

MANIFEST #:	
PROJECT/OU:	
EXCAVATION/STAGING/QUEUING AREA:	
VISUAL DESCRIPTION:	
IMPACTED MATERIAL CATEGORY (CHECK ONE): 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 5 <input type="checkbox"/>	
THIS MATERIAL MEETS THE WAC FOR THE FEMP OSDF:	DATE: TIME:
(GENERATOR)	
TRANSPORTED BY:	VEHICLE #: DATE: TIME:
(TRANSPORTER)	
OSDF RECEIPT:	DATE: TIME:
(ON-SITE DISPOSAL FACILITY)	
DISPOSAL LOCATION:	DATE: TIME:
(ON-SITE DISPOSAL FACILITY)	

FS-F-4919 (07/08/97)

P

L

E